

REMARKS

Applicants' attorney thanks Examiners Behringer and Layno for the courtesy of the telephone interview held on April 13, 2009. During the interview the claimed invention was discussed in relation to the Keusch, Walters, Heath, and Olson et al. references.

Applicants' attorney pointed out that embodiments of the present invention exhibited the following advantages over the prior art:

- No moisture-proof pouch or envelope is required
- Contrary to conventional thinking, electrode is peeled from the release liner, rather than the reverse
- Release liner is rigid, contrary to usual practice, so electrode can be easily peeled away
- A single rigid release liner can serve both electrodes by sealing the electrodes on opposite sides of the release liner

The Keusch invention (US 4,989,607) is a specially-formulated hydrogel sheet. Two embodiments are described by Keusch. In the first embodiment, a hydrogel sheet with peelable release liners on each side is stored in moisture-impermeable packet or envelope (col. 14, lines 35-39). In the second embodiment a hydrogel sheet is affixed to a conductive electrode with the hydrogel sheet covered by a peelable backing material. The resultant assembly is stored in aluminum foil laminate package (col. 13, lines 36-65). With regard to the present claimed invention, Keusch has the following differences/deficiencies:

- A moisture-proof packet or envelope required to prevent drying of Keusch's hydrogel sheet
- Release liner is peeled from the hydrogel
- Each hydrogel sheet or electrode assembly requires 1 or more release liners
- An electrode moisture barrier layer is never mentioned
- No heat-sealing of release liner or moisture barrier layer
- No rigid release liner
- No electrodes on opposite sides of release liner

The Walters patent (US 5,916,244) describes an electrode with three conductive layers, one of which can be a hydrogel. The hydrogel surface of each electrode is covered with a transparent release liner which protects the tacky hydrogel sheet prior to use of the electrode (col. 3, lines 33-40). With regard to the present claimed invention, Walters has the following differences/deficiencies:

- No consideration of problem of hydrogel drying
- Release liner is "removed" from each electrode prior to use
- Each electrode requires its own release liner
- No heat-sealing of release liner or electrode moisture barrier layer
- No rigid release liner
- No electrodes on opposite sides of release liner

The Heath patent (US 4,419,998) describes an electrode system that can be connected to an ECG system, a stimulation system, and a defibrillator. A gel foam disk of the electrode is protected by a cover which is secured to the adhesive layer on a ring which holds the gel foam disk in place (col. 15, lines 9-19). With regard to the present claimed invention, Heath has the following differences/deficiencies:

- The cover does not prevent desiccation of the gel because the adhesively attached cover provides only "a substantially air-tight" seal.
- Cover is "removed" prior to use of the electrode
- Each electrode requires its own cover
- No heat-sealing of cover or electrode moisture barrier layer
- No rigid release liner
- No electrodes on opposite sides of release liner

The Olson et al. patent describes a plurality of electrodes which are electrically connected together prior to use. The conductive adhesive 54 of each electrode is covered with a liner 61 of plastic sheeting or treated paper. A single liner sheet may be used, then folded to store the electrodes in a pouch-type package 60, 212, 314. See col. 5, lines 19-23 and col. 6, lines 17-19. With regard to the present claimed invention, Olson et al. has the following differences/deficiencies:

- Electrodes must be stored in a moisture-proof pouch 60, 212, 314 to prevent drying
- Removal of liner (plastic sheeting or treated paper) is not discussed
- Backing layer 52 is not described
- No heat-sealing of release liner or electrode moisture barrier layer
- No rigid release liner
- No electrodes on opposite sides of release liner

During the interview discussion the Examiners recommended adding claim language which emphasized that the sealing of the electrode moisture barrier layer to the rigid backing provides an enclosure for the gel which obviates the need for a separate pouch or envelope to provide a sealed enclosure for the gel. The Examiners also recommended emphasizing the conductive connection of the two electrodes when mounted on opposite sides of the rigid release liner as described in Claim 10. Accordingly, applicants provide the above amended claims, which are seen from the foregoing discussion to describe the numerous differences listed above as compared with the prior art.

In light of the foregoing amendment and remarks, it is respectfully submitted that this application is now in condition for allowance. Favorable reconsideration is respectfully requested.

Respectfully submitted,

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